

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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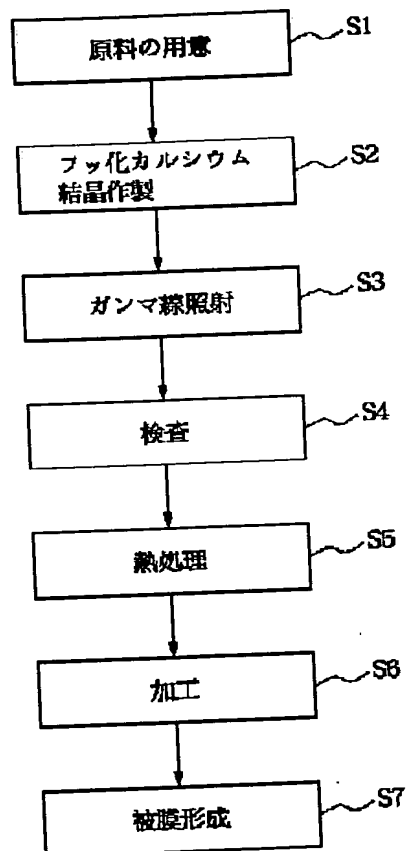
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TITLE : CALCIUM FLUORIDE CRYSTAL



ABSTRACT : PROBLEM TO BE SOLVED: To obtain a calcium fluoride crystal excellent in durability and to provide a method for testing the calcium fluoride crystal having a high accuracy in sorting out a non-defective.

SOLUTION: A calcium fluoride crystal having  $\leq 8\%$  decreasing rate of internal transmittance based on 10 mm thickness at 260-280 nm wavelength after irradiation with  $\gamma$ -rays at  $1 \times 10^5$  R/h radiation dose is sorted out and used to prepare an optical part which is an optical part for ultraviolet rays and vacuum ultraviolet rays. An exposure device is capable of irradiating a material to be exposed with the ultraviolet rays by using the part in an optical system. The internal transmittance can be increased by carrying out a heat treatment in a vacuum or an inert gas.

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